Central Railroad of New Jersey: Pier 19
On the Hudson River Waterfront
Jersey City
Hudson County
New Jersey

HAER No. NJ-27B

HAER
NJ,
9-JERCI,
4-B-

PHOTOGRAPHS

HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, D. C. 20240

HAER NJ, 9-JERCI, 4-B-

HISTORIC AMERICAN ENGINEERING RECORD

Central Railroad of New Jersey: Pier 19

NJ-27B

| | |
|---|---|
| Location: | On the Hudson River waterfront in Jersey City, Hudson County, New Jersey, approximately 0.95 mile south of the south shore of the Morris Canal Basin, 0.6 mile northwest of the Statue of Liberty National Monument, and 1,500 feet southwest of Ellis Island.<br><br>UTM: 18.580200.4505290<br><br>Quad: Jersey City |
| Date of Construction: | c. 1920 |
| Present Owner: | State of New Jersey, Division of Parks and Forestry, Department of Environmental Protection, Trenton, New Jersey 08625 |
| Present Use: | At the time of the survey (December 1979), the pier was leased by Tug and Barge Dry Dock, Inc., a subsidiary of McAllister Brothers, Inc. for part of their harbor craft repair facilities. It has since been razed and all traces removed from the waterfront. |
| Significance: | The pier and its attendant structures represent the last vestiges of the repair facility for the harbor craft of the Central Railroad of New Jersey, which developed its huge harborside transportation complex on the Jersey City shoreline in the nineteenth and twentieth centuries. |
| Historians: | Ralph J. Leo and Herbert J. Githens, Historic Conservation and Interpretation, Inc., Box 111, RD 3, Newton, New Jersey 07860; December 1979. |
| Transmitted by: | Jean P. Yearby, 1984. |

# PHOTOGRAPHIC RECORDING AND ARCHITECTURAL DESCRIPTION OF THE STANDING STRUCTURES, PIER 19 LIBERTY STATE PARK, JERSEY CITY, N.J.

by

HERBERT J. GITHENS
MICHAEL SPOZARSKY
RALPH J. LEO, JR.
and
EDWARD S. RUTSCH, S.O.P.A.

of

HISTORIC CONSERVATION & INTERPRETATION, INC.
Box 111, RD 3, Newton, New Jersey 07860

for

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Trenton, N.J.

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## LIST OF ILLUSTRATIONS

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# I. INTRODUCTION

The following report is herewith submitted to the New Jersey Department of Environmental Protection by Historic Conservation and Interpretation, Inc., of Newton, New Jersey, as part of the mitigation of the negative impact to Pier 19, originally part of the Central Railroad of New Jersey's marine repair yards, caused by the proposed Army Corps of Engineers' Drift Removal Project and the proposed construction of Liberty State Park, Jersey City, New Jersey. The facilities on Pier 19 consist in a comparatively short wooden-timbered pier on wooden pilings, several floating dry docks, a materials storage yard, and a series of shops, storehouses, and office buildings. The entire area is served by a self-propelled crane operating on a system of tracks connecting various elements of the yard. The docks--that extending into the river and those along the shore--are slated to be removed in the Drift Removal Project, at which time the present operator of the yard will have to leave. Although not part of this proposed drift removal project, the rest of the facilities are to be razed during the proposed Liberty State Park development as it is now being planned.

Mitigation of the impact to Pier 19, which has been determined as meeting the criteria of significance for inclusion on the National Register of Historic Places, consists in two parts: (1) a photorecording of extant structures and equipment accompanied by an architectural description and analysis of the standing structures; and (2) a film recording of

Pier 19 as part of the McAllister Tug and Barge Repair Facilities. The following pages are the result of part (1) of this mitigation. Historical documentation was written by Ralph J. Leo, Edward S. Rutsch, and Herbert J. Githens. Mr. Githens also provided the architectural description and analysis; Michael Spozarsky was the photographer.

## II. HISTORIC DOCUMENTATION

The development of the American railroad during the post-Civil War period demonstrated two distinct patterns of growth: (1) westward expansion, and (2) concentration of railroad resources in the Northeast. By the end of the nineteenth century, as the western network of rails connected all remote areas of the nation, lines east of the Mississippi River had completed large-scale systems to deliver passengers and freight to the country's largest port--New York Harbor (HCI 1977; CRMS 1978). The terminus of these systems was Jersey City, controlling many miles of tidewater on the western shore of the harbor; the influence of the rail lines on the shoreline was tremendous. By the early 1920s, many hundreds of acres of new land had been created through landfill and dredging projects, and massive rail-marine facilities lined the harbor (Raciti 1968; *Waterfront Development* 1964; New Jersey Harbor Commission 1914). During the latter years of the nineteenth century, Jersey City terminals handled 90% of all export railroad freight going into and out of the harbor. In the years between 1875 and 1921, the harbor's share of the total national foreign trade ranged between 57 and 44% (Taylor 1951).

One of the largest railroad companies to establish facilities on the Jersey City shore was the Central Railroad Company of New Jersey (CRRNJ) (CRRNJ 1949; Raciti 1968; *Waterfront Development* 1964). Beginning c. 1900, the CRRNJ filled and dredged extensive areas from Black Tom Island to the Lehigh Valley Railroad's facilities at the Morris Canal basins (*Engineering News* 1914; HCI 1977). [Before this time, lands to the west had been created by the CRRNJ from c. 1867, utilizing New York City refuse and making a vast new acreage east of the former shoreline and into the South Cove (CRRNJ 1949; HCI 1977).] For over 20 years, the CRRNJ created new bulkheads, dividing dikes, and new piers and facilities. Included in this long-term development was a new engine facility and roundhouse at Communipaw, a completely remodeled passenger station, a new ferryhouse and trainshed, and a large-scale enlargement and reorganization of CRRNJ freight facilities. The redesign yielded four new ferryboat slips that were two-storied for freight below and passengers above. Ferryboat service across New York Bay at this time consisted of 129 movements a day to Liberty Street in New York and 57 movements a day to 23rd Street (*Railway Age Gazette* 1914B: 860). In addition to passenger service, the Jersey Central also operated an extensive freight service using both lighterage and car float techniques. This activity took place south of the passenger terminal on various covered and open piers and transfer bridges.

In the early years of the second decade of the twentieth century, most of the areas slated for development had been filled and most of the offshore dredging had been completed. Although most new facilities

were either in construction or completed, pressing wartime activities slowed the development projects. By 1920, the bulkhead and dredging had been completed for two new piers and related facilities (*Railway Age Gazette* 1914A, 1914B, and 1915; *Railway Age* 1918, 1919; *Engineering News-Record* 1920). One, Pier 18, was to house the nation's largest coal-loading facilities. The second, Pier 19, was to become a facility for repairing CRRNJ ferryboats, barges, and other marine vehicles related to passenger and freight operations (*Engineering News-Record* 1920; James 1978: personal communication; *Railway Age* 1919).

Pier 19, constructed c. 1920, was developed on railroad property by the Communipaw Dry Dock Company, Boat Repairing Corporation, under lease from the CRRNJ. The pier was erected approximately 1,500 feet southwest of Ellis Island and was approximately 500 feet long by 40 feet wide. It was reached via a 15-foot-wide unpaved road from Caven Point Road, and was serviced by two rail lines--one along the bulkhead and another extending out onto the pier. The bulkhead was 364 feet long and was crossed, at the pier, by a single track 485 feet long (U.S. Army Corps 1942, 1955). These tracks were utilized by steam-powered work cranes that performed duties on the pier and in the yard, inshore. The cranes, owned and operated by the CRRNJ and used on several other piers as well, consisted in five steam cranes of 30-ton capacity, two steam cranes of 33-ton capacity, and one gas crane of 40-ton capacity (Tug and Barge Dry Dock, Inc. 1978; U.S. Army Corps 1942, 1955). This operation was able to perform normal maintenance as well as major repairs to the company's ferryboats, barges, and marine vehicles.

Along the 364-foot-long bulkhead on Pier 19, dredged to a depth of from 10 to 16 feet, was berthage for floating dry docks moored on both sides of the pier. The pier was equipped with high-voltage electricity, steam lines, and compressed air and water service. The inshore portion of the pier contained a machine shop, an office and storage building, carpenters' and joiners' shops, a sawmill, a lumber storage shed, a blacksmith shop, a paint storage shed, men's locker rooms and toilets, and a dining hall. The powerhouse northeast of the yard, demolished except for the chimney stack by the CRRNJ along with the coaling facility on Pier 18, provided the necessary power to both piers 18 and 19. The thawing sheds, part of Pier 18's coal-loading operations, are deteriorated but are still extant north of the yard. Pier 19 has appeared much as it does today since 1955, when Tug & Barge Dry Dock, Inc., a subsidiary of McAllister Bros., Inc. took over the facility and continued its original operations with minor modifications particular to the new company (U.S. Army Corps 1942, 1955; *Hopkins' Plat Book of Hudson County, N.J.* 1928-34; Sanborn 1911, 1939).

## III. ARCHITECTURAL DESCRIPTION

The buildings in the Pier 19 yard are of varying construction type. Materials and methods employed seem to have been dictated by function. The machine shop, blacksmith shop, and sawing mill are of metal-clad construction; the storage sheds are of wood frame; and the offices, lockers, and dining hall are of brick walling. Perhaps the most interesting buildings architecturally are the thawing houses,

owing to their precast concrete structure and wall panel systems. All the buildings and structures of Pier 19 derive their significance for the operations they housed rather than for their architecture or building technology.

The remainder of this report consists in architectural descriptions and photographs of the standing structures of Pier 19: (1) the sawing mill, (2) the lumber shed, (3) the carpentry shop, (4) the storage shed, (5) the offices/annex, (6) the offices/storage, (7) the materials storage, (8) the machine shop, (9) the office, (10) the powerhouse, (11) the guard house, (12) the old paint shed, (13) the blacksmith shop, (14) the rest rooms and lockers, (15) the old dining hall, (16) the south thawing shed, and (17) the north thawing shed. These numbers refer to the structures shown on Figure 1, a map of Pier 19. Figure 2 is an aerial view of the pier, showing its configuration in 1968.

1. SAWING MILL (c. 1920)
(See Photos 2, 17, 19, 20, 21)

The sawing mill is a simple, one-story, rectangular building measuring 40 by 100 feet. Brick foundation walls sixteen courses high provide a continuous sill level for wood sash windows. Wood framing between windows is clad with corrugated metal and wood siding. Trusses of built-up plate and angle sections span the space in the transverse direction. Purlins tie the trusses together and receive the wooden roof decking. The building is open at the east gable end.

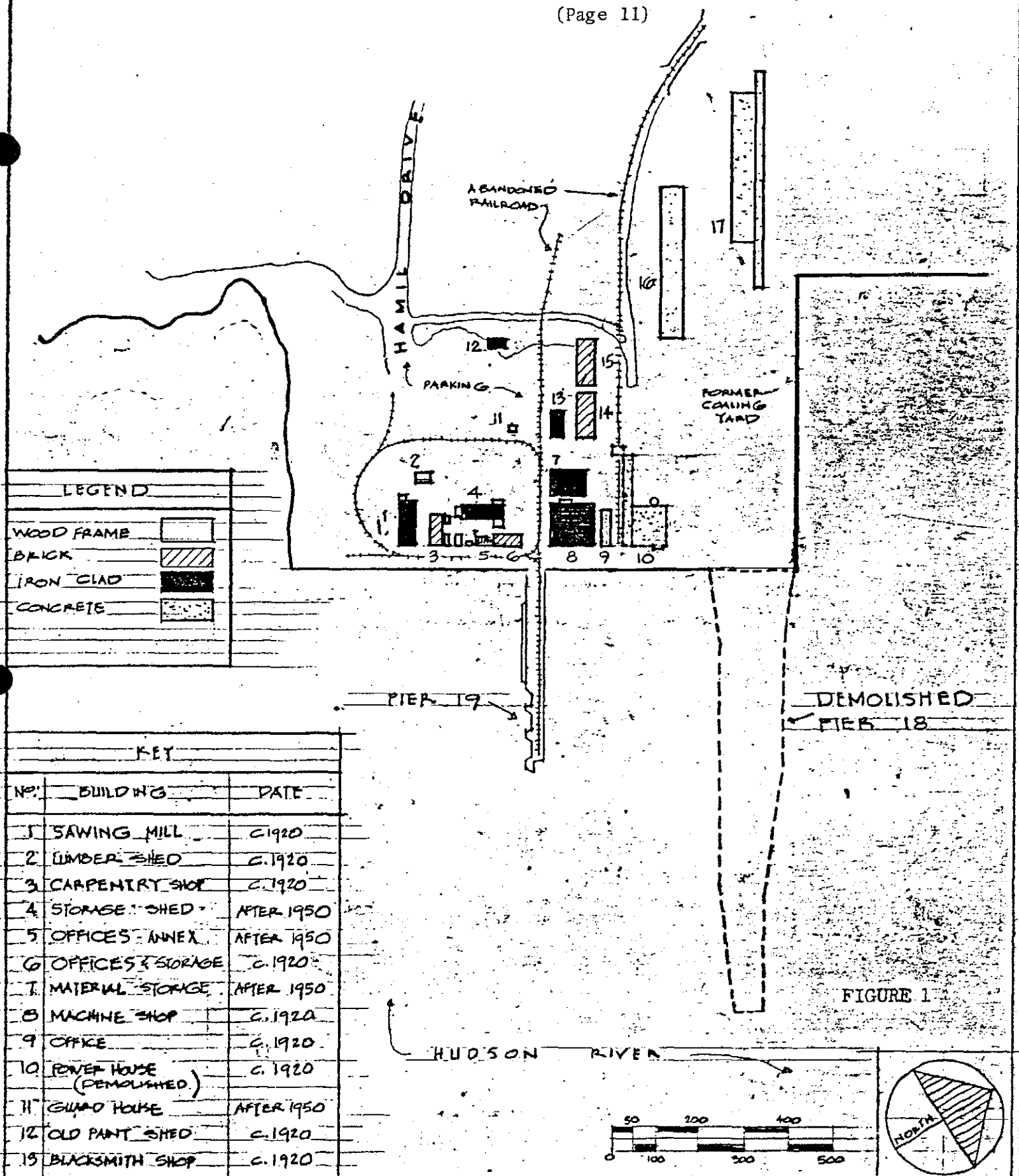


FIGURE 1

| KEY | | |
|---|---|---|
| No. | BUILDING | DATE |
| 1 | SAWING MILL | c.1920 |
| 2 | LUMBER SHED | c.1920 |
| 3 | CARPENTRY SHOP | c.1920 |
| 4 | STORAGE SHED | AFTER 1950 |
| 5 | OFFICES ANNEX | AFTER 1950 |
| 6 | OFFICES & STORAGE | c.1920 |
| 7 | MATERIAL STORAGE | AFTER 1950 |
| 8 | MACHINE SHOP | c.1920 |
| 9 | OFFICE | c.1920 |
| 10 | POWER HOUSE (DEMOLISHED) | c.1920 |
| 11 | GUARD HOUSE | AFTER 1950 |
| 12 | OLD PAINT SHED | c.1920 |
| 13 | BLACKSMITH SHOP | c.1920 |
| 14 | REST ROOM & LOCKERS | c.1920 |
| 15 | OLD DINING HALL | c.1920 |
| 16 | SOUTH THAWING SHED | c.1920 |
| 17 | NORTH THAWING SHED | c.1920 |

PIER 19 LIBERTY PARK
JERSEY CITY, NEW JERSEY
TUG & BARGE DRY DOCK, INC. - McALLISTER BROS. INC.
DECEMBER 1977
HISTORIC CONSERVATION AND INTERPRETATION, INC.

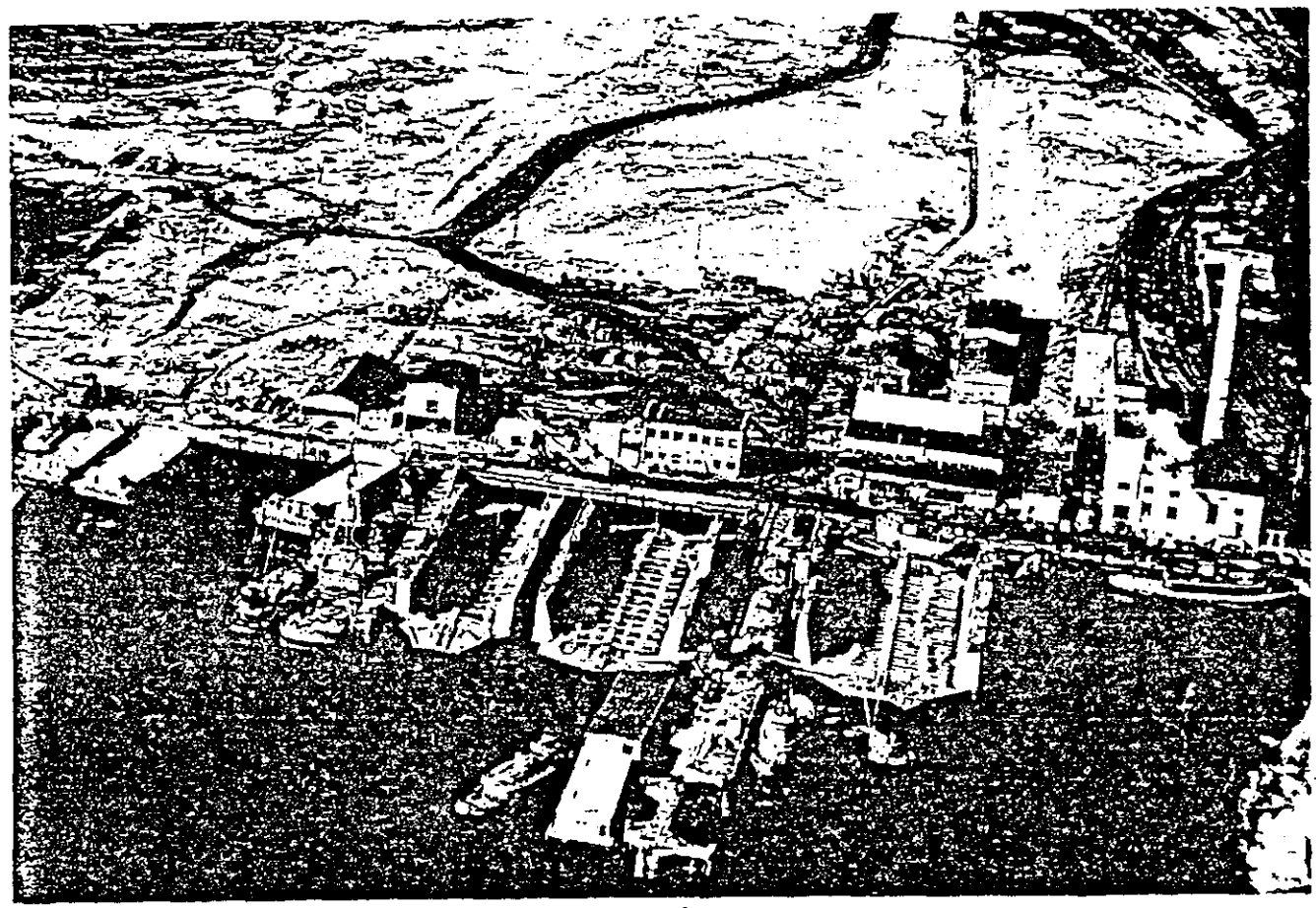

FIGURE 2. Portion of an aerial view of Pier 19 taken by The Port of New York Auhtority in 1968 (copied 1980 by Ralph Leo). Identification of buildings can be made easily by comparison with the map shown in Figure 1. Shown here but only indicated in Figure 1 is the powerhouse, since razed by the CRRNJ (far right). Shown here and not in Figure 1 are the floating dry docks on either side of the pier. (Negative Number 801-69.)

2. LUMBER SHED (c. 1920)
(See Photos 2, 14, 16)

The lumber shed is a simple rectangular building of 20 by 30 feet. It has three pairs of doors and an overhang on its east side. The wood frame construction is sheathed in vertical board and batten siding. The doors have diagonal panels.

3. CARPENTRY SHOP (c. 1920)
(See Photos 2, 6, 8, 14, 17, 18)

The carpentry shop is a two-story brick structure rectangular in shape and measuring 65 by 35 feet. A metal rollup door spans continuously across the first floor of the east end. A wood-framed canopy overhangs the center part of the opening; a pair of cross-bucked doors with upper glass sections is centered over this canopy on the second floor. This double door opening is spanned by a concrete lintel. The red brickwork is laid in running bond in thick joints of mortar. The end gables form parapets for the gable roof. These ends carry the brickwork upward in corner piers with concrete caps from which the parapet slopes on either side up to a higher flat section at the center. All portions have concrete coping of heavy aggregate mix. The second floor ceiling line is pronounced by a corbelling of the brickwork in three courses over the walling surfaces, which is continued on all four sides and broken at each of the four corner piers.

The carpentry shop windows are industrial metal sash with rotating corner panels. They are four rectangular panes high and six across, with

the moveable portion being two by four panes. Lintels and sills are of concrete. Windows are located on the first and second floors along the long north and south walls.

Two exterior metal stairs are hung on metal brackets on the north and south walls, providing direct access to the second floor from the outside.

4. STORAGE SHED (post-1950)
(See Photos 2, 6, 8, 13, 15, 17)

The storage shed is a modern building of the "Butler" type spanned by steel bents which are bolted to concrete footings and joined at the ridge point. The exterior is sheathed in corrugated metal siding. Internally, the building is one large storage space; externally, it is two stories high in scale with its surroundings. One-story wood frame sheds are attached to the east side; a metal shed is attached to the west side (see Photo 8).

5. OFFICES/ANNEX (post-1950)
(See Photos 6, 13, 15)

This eccentric-shaped two-story building is appended to the south end wall of the two-story brick offices/storage building (see No. 6 below and Figure 1). The exterior material is welded sheet metal panels. The roof is flat and windows are double hung aluminum sash. A metal stair gives direct access to the second floor on the west side, reaching an uncovered landing in the southwest corner (see Photo 15). A bridge at the second floor level adjoins and connects this annex to the main offices/storage building (see Photo 13).

6. OFFICES/STORAGE BUILDING (c. 1920)
(See Photos 2, 6, 7, 8, 12, 13, 15)

The offices/storage building is constructed in a similar manner to that of the carpentry shop described as item 3, above. Some of the steel sash have been replaced with aluminum units (see Photo 6). The first floor is reached from an enclosed wooden porch on the west side of the structure (see Photo 15). As the iron brackets seem to indicate, this entrance was originally roofed but not enclosed. The south end wall is blank except for the bridge to the annex. Direct access from the outside to the second floor is via a metal stair on the north end wall (see Photo 6).

7. MATERIALS STORAGE BUILDING (post-1950)
(See Photos 1, 4, 5)

The materials storage building is a metal-clad rectangular building, sheathed in corrugated metal. The south gable end wall contains a pair of rolling doors at the center, which consist of metal panels on overhead tracks (see Photo 5). Windows are of the industrial metal sash variety with pivoting panels.

8. MACHINE SHOP (c. 1920)
(See Photos 3, 4, 6, 12, 15)

The machine shop is a 100-by-100-foot square in plan. The form is of three components: a central raised monitor portion flanked by sheds on either side (see Photo 3). The sheds have brick foundations and continuous concrete sills. Wood framing above the foundation is

sheathed in horizontal wood siding along the east and west sides. Corrugated metal panels are also employed. The monitored, center portion is lifted higher on a brick wall, with wood sill and wood sash above. A metal roll-up door is located at the center of the south end wall. The upper end of this gable end is sheathed with corrugated metal. The clerestory windows along the sides of the monitor are of the industrial steel sash type. Metal trusses span the space internally.

9. OFFICE (c. 1920)
(See Photo 6)

The office is a one-story rectangular building measuring 20 by 80 feet. It is constructed of hollow structural clay tiles with terra cotta coping and flat roof. The foundation and lintels are of concrete.

10. POWERHOUSE (c. 1920; demolished)
(See Photo 1)

The powerhouse was demolished along with the coal-loading facility on Pier 18. Only the chimney stack remains. (The powerhouse as it appeared in 1968 is shown in Figure 2.)

11. GUARD HOUSE (post-1950)
(See Photo 1)

The guard house is a simple one-story wood-framed building sheathed in plywood with battens. The double-hung sash and the doors are of wood. The gable roof is projected over a porch to the south supported by two wooden posts.

12. OLD PAINT SHED (c. 1920)
(See Photo 1)

This storage building measures 20 by 400 feet, is one story in height, and is clad with corrugated metal siding. The south end gable has a rectangular opening without a door. The windows are of the typical industrial type along the east and west sides.

13. BLACKSMITH SHOP (c. 1920)
(See Photos 1, 4, 9, 10, 11)

The blacksmith shop is a rectangular building measuring 30 by 50 feet and having a monitor roof along the center. It is raised on a brick foundation wall with a continuous concrete sill. Above the foundation, wood framing is clad in wood and corrugated metal siding. Sash are fixed wooden units of 12 panes. The monitor contains wooden louvers and two 4-paned fixed sash on either side. The space is spanned by built-up trusses of plate and angle shapes. Purlins join the trusses longitudinally and receive the wood sheathing of the roof.

14. REST ROOMS AND LOCKERS (c. 1920)
(See Photo 1)

The brick masonry construction of this building is similar to that of the carpentry shop (No. 3) and of the offices/storage building (No. 6). It is a one-story 400-by-100-foot rectangle. A center span of a steel girder is supported by a row of steel columns made up of angles and plates. Concrete lintels and sills frame the window openings of metal sash.

15. OLD DINING HALL (c. 1920)
(See Photo 1)

This building is of identical size and construction to the rest rooms and lockers building.

16 and 17. SOUTH AND NORTH THAWING SHEDS (c. 1920)
(See Photos 1, 22, 23, 24)

These rectangular structures measure 50 by 320 feet each. They are three bays wide and are constructed of precast concrete columns, girders, and wall panels.

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1978 Several of the company's employees have supplied HCI with important data on the functioning of Pier 19. One, a blacksmith with the original company, began working there in 1940, and spoke of the blacksmith facility as "my shop." Another, a crane operator, began working for the CRRNJ in 1936 and operated steam cranes on the pier. When the McAllister Bros., Inc. subsidiary took over in 1955, he remained at the Pier 19 facilities as an employee of the dry dock company. His over 40 years on the pier have provided useful insights into its functions.

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## MAPS

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